



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 21 83 33 10

Classification of the application (IPC):
H01Q 5/385, H01Q 5/392, H01Q 1/24, H01Q 9/42

Technical fields searched (IPC):
H01Q

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2009015487 A1 (CHEN WEN-HUA [CN] ET AL) 15 January 2009 (2009-01-15)	1, 4, 8-10, 12, 15
A	* paragraph [0017] - paragraph [0029]; figures 1-5 *	2, 3, 6
X	WO 2019129098 A1 (HUAWEI TECH CO LTD [CN]) 04 July 2019 (2019-07-04) * page 1 - page 11; figures 3-9 * & US 2023216196 A1 (XUE LIANG [CN] ET AL) 06 July 2023 (2023-07-06)	1-15
A	CN 111180872 A (VIVO COMM TECHNOLOGY CO LTD) 19 May 2020 (2020-05-19) * paragraph [0003] - paragraph [0088]; figures 1-4 *	1-15
X	WO 2012147355 A1 (PANASONIC CORP [JP]; KOYANAGI YOSHIO; ASAHINA TOSHIHIRO) 01 November 2012 (2012-11-01) * paragraph [0006] - paragraph [0054]; figures 1-3 *	13-15
X	US 2018278287 A1 (NISHIKAWA KENJI [JP] ET AL) 27 September 2018 (2018-09-27) * paragraph [0104] - paragraph [0109]; figures 19,20 *	13-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 18 October 2023	Examiner Sípál, Vít
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CATEGORY OF CITED DOCUMENTS

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|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
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| | L: document cited for other reasons |
| & : member of the same patent family, corresponding document | |

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 18-10-2023
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